Scientific Inquiry

K-1 The student will demonstrate an understanding of scientific inquiry, including the processes, skills, and mathematical thinking necessary to conduct a simple scientific investigation.

K-1.1 Identify observed objects or events by using the senses.
Taxonomy Level: 1.1-A Remember Factual Knowledge

Previous/Future knowledge: As with other indicators at this grade level, students will experience their first formal introduction to important science skills and processes. The development of these skills will serve as the basis for all future science investigations. In 2nd grade (2-1.4), students will infer explanations regarding scientific observations and experiences. In 4th grade (4-1.1), students will classify observations as either quantitative or qualitative.

It is essential for students to know that making *observations* is a way of learning about the world around us.

- A *scientific observation* is one that anyone can make and the result will always be the same. For example, the plant is green, has three leaves, and feels smooth.
- An *unscientific observation*, or an opinion, is one that not everyone may agree on. For example, the flower is pretty.
- Observing does not mean just looking at something. It involves the use of several or all of the five senses (seeing, hearing, smelling, touching, and tasting) using appropriate observation methods for each sense, such as wafting an odor so that its smell can be described or gently touching the edges of seashells to determine their textures.
- Tasting in science should only be done with the permission of the teacher under controlled conditions.
- Observing helps to find out about objects (their characteristics, properties, differences, similarities) and events (what comes first or last, or what is happening at a particular moment).

It is not essential for students to identify observations as qualitative or quantitative.

Assessment Guidelines:
One objective of this indicator is to *identify* observed objects or events by using the senses; therefore, the primary focus of assessment should be to recall that observations are made using some or all of the five senses. However, appropriate assessments should also require students to *recognize* characteristics of objects or events that are made using the five senses; *match* an observation with the appropriate sense; or *recognize* the appropriate method of making an observation using each of the senses.